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Mailing Date: January 20, 2004 Attorney/Sec: PFC/RLB/pb
Client: 71758 Docket No.: 46943-CIP2
Inventors: Jin-an JIAO, et al.
Serial No.: 09/990,586 Patent No.:
Filing Date: November 21, 2001 Grant Date:

The dating stamp of the Patent and Trademark Office hereon will be taken as the date of filing of:
Supplemental Information Disclosure Statement; Form PTO-1449 (one sheet); copy of single
reference listed thereon; Certificate of Mailing.



Due Date: N/A



Attorney Docket No. 46943-CIP2 (71758)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Jin-an JIAO, et al.

U.S.S.N.: 09/990,586

Group Art Unit: 1644

FILED: November 21, 2001

Examiner: Not yet assigned

FOR: ANTIBODIES FOR INHIBITING BLOOD COAGULATION AND METHODS
OF USE THEREOF

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to the: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 on January 20, 2004.

By: Patricia A. Barnes
Patricia A. Barnes

**SUPPLEMENTAL
INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Date: January 20, 2004

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION

The patents, publications or other information submitted for consideration by the Office are listed on PTO-1449, attached hereto.

II. COPIES

- a. Submitted herewith is a legible copy of (i) each U.S and foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.

III. CONCISE EXPLANATION OF THE RELEVANCE
(check at least one box)

- a. Except as may be indicated below in (b), all of the patents, publications or other information are in the English language or were cited in an English language Search Report, a copy of which is attached hereto (concise explanation not required).
- b. A concise explanation of the relevance of all patents, publications or other information listed that is not in the English language is as follows:
- c. The following additional information is provided for the Examiner's consideration:

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IV. THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97(b)
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- a. within three months of the filing date of a national application (37 C.F.R. § 1.97(b) (1)). No fee or certification is required.
- b. within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. § 1.97(b) (2)). No fee or certification is required.
- c. before the mailing date of a first Action on the merits (37 C.F.R. § 1.97(b) (3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e) below, or,

if no certification has been made, charge our deposit account a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p).

V. THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97(c):
(check one box)

before the mailing date of a Final Office Action under 37 C.F.R. § 1.113 (See 37 C.F.R. § 1.97(c) (1)) or before the mailing date of a Notice of Allowance under 37 C.F.R. § 1.311 (See 37 C.F.R. § 1.97(c) (2)).

- a. No certification; therefore, a fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).
or
- b. See the certification below. No fee is required.

VI. CERTIFICATION UNDER 37 C.F.R. § 1.97(e) (check only one box)

The undersigned hereby certifies that

- a. each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS; or
- b. no item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application or, to the best of my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this statement.
- c. Some of the items of information were cited in a communication from a foreign Patent Office. As to this information, the undersigned certifies that each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application or, to the best of my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this statement.



Please charge Deposit Account No. 04-1105 in the amount of \$180.00 for the above-indicated fee. A triplicate copy of this paper is attached.



No fee is required.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition, if necessary) and charge the appropriate fee to Deposit Account No. 04-1105.

Respectfully submitted,



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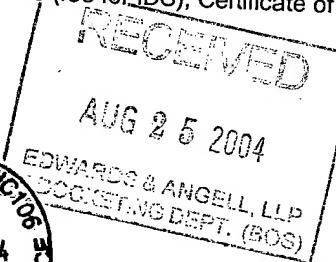
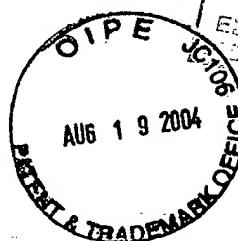


RLB

Mailing Date: August 19, 2004 Attorney/Sec: PFC/RLB/pb
Client: 71758 Docket No.: 46943-CIP2
Inventors: Jin-an JIAO, et al.
Serial No.: 09/990,586 Patent No.:
Filing Date: November 21, Grant Date:
2001

The dating stamp of the Patent and Trademark Office hereon will be taken as the date of filing of:
Second Supplemental Information Disclosure Statement; Form PTO-1449 (one sheet); One copy of
each reference listed thereon; Check in the amount of \$180.00 (fee for IDS); Certificate of Express
Mail.

Express Mail Label No. EV438994483US



Due Date: N/A

SB



Attorney Docket No. 46943-CIP2 (71758)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Jin-an JIAO, et al.

U.S.S.N.: **09/990,586** Group Art Unit: 1644

FILED: November 21, 2001 Examiner: M. Haddad

FOR: ANTIBODIES FOR INHIBITING BLOOD COAGULATION AND
METHODS OF USE THEREOF

.....
CERTIFICATE OF EXPRESS MAIL

I, Patricia A. Barnes, hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service with sufficient postage as "Express Mail Post Office To Addressee" service, Label No. EV438994483US in an envelope addressed to Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 on August 19, 2004.

By: Patricia A. Barnes
Patricia A. Barnes

.....
**SECOND SUPPLEMENTAL
INFORMATION DISCLOSURE STATEMENT
(SUBMISSION AFTER FILING OF AN APPLICATION
BUT BEFORE FINAL REJECTION OR NOTICE OF ALLOWANCE)**

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Date August 19, 2004

Sir:

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V. THIS IDS IS BEING FILED UNDER 37 C.F.R. § 1.97(c):
(check one box)

before the mailing date of a Final Office Action under 37 C.F.R. § 1.113 (See 37 C.F.R. § 1.97(c) (1)) or before the mailing date of a Notice of Allowance under 37 C.F.R. § 1.311 (See 37 C.F.R. § 1.97(c) (2)).

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or
b. See the certification below. No fee is required.

VI. CERTIFICATION UNDER 37 C.F.R. § 1.97(e) (check only one box)

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- b. no item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application or, to the best of my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this statement.
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known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this statement.

- Please charge Deposit Account No. 04-1105 in the amount of \$180.00 for the above-indicated fee. A triplicate copy of this paper is attached.
- No fee is required.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition, if necessary) and charge the appropriate fee to Deposit Account No. 04-1105.

Respectfully submitted,

Date: *19 April 2004*


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Customer No.: 21874

#454792



| INFORMATION DISCLOSURE STATEMENT | | | DOCKET NO: | | SERIAL NO.: | | |
|--|----|--|-----------------------------------|-------------------|--------------------|-----------|----------------------------------|
| | | | 46943-CIP2 (71758) | | 09/990,586 | | |
| | | | APPLICANT(S): Jin-an JIAO, et al. | | | | |
| | | | FILING DATE: November 21, 2001 | | GROUP NO.: 1644 | | |
| UNITED STATES PATENT DOCUMENTS | | | | | | | |
| EXAM. INITIALS | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
| | AA | 4,816,567 | 3/28/89 | Cabilly et al. | 530/387 | 435/68 | 4/8/83 |
| | AB | 5,122,458 | 6/16/92 | Post et al. | 435/69.1 | 435/69.2 | 1/11/89 |
| | AC | 5,168,062 | 12/1/92 | Stinski | 435/240.2 | 435/320.1 | 9/10/90 |
| | AD | 5,385,839 | 1/31/95 | Stinski | 435/240.2 | 435/69.1 | 6/17/92 |
| | AE | 5,879,677 | 3/9/99 | del Zoppo | 424/145.1 | 424/139.1 | 1/13/95 |
| | AF | 6,001,978 | 12/14/99 | Edgington et al. | 530/391.3 | 424/139.1 | 4/22/97 |
| | AG | 6,054,297 | 4/25/2000 | Carter et al. | 435/69.6 | 435/69.7 | 5/9/95 |
| | AH | 6,331,415 B1 | 12/18/01 | Cabilly et al. | 435/69.6 | 435/69.1 | 6/10/88 |
| | AI | 6,677,436 B1 | 1/13/04 | Sato et al. | 530/387.3 | 530/387.9 | 4/2/99 |
| | AJ | 2003/0119075 A1 | 6/26/03 | Kirchhofer et al. | 435/7.21 | 424/145.1 | 3/8/01 |
| | AK | 2003/0087372 A1 | 5/8/03 | DelaCruz et al. | 435/69.1 | 435/325 | 6/11/02 |
| | AL | 5,889,157 | 3/30/99 | Pastan et al. | 530/387.1 | 530/387.3 | 10/28/94 |
| | AM | 6,610,293 B1 | 8/26/03 | Fischer et al. | 424/133.1 | 530/387.3 | 6/15/98 |
| | AN | 5,530,101 | 6/25/96 | Queen et al. | 530/387.3 | 530/387.1 | 12/19/90 |
| FOREIGN PATENT DOCUMENTS | | | | | | | |
| | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION YES/NO |
| | BA | EP 1 069 185 A1 | 17/01/2001 | Europe | | | Y |
| OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.) | | | | | | | |
| | CA | I. Benhar, et al., Rapid Humanization of the Fv of Monoclonal Antibody B3 By Using Framework Exchange of the Recombinant Immunotoxin B3(Fv)-PE38, Proc. Natl. Acad. Sci. USA, December 1994, Vol. 91, pages 12051-12055. | | | | | |
| | CB | J. R. Couto, et al., Anti-BA46 Monoclonal Antibody Mc3: Humanization Using a Novel Positional Consensus and in Vivo and in Vitro Characterization, Cancer Research, April 15, 1995, Vol. 55, pages 1717-1722. | | | | | |

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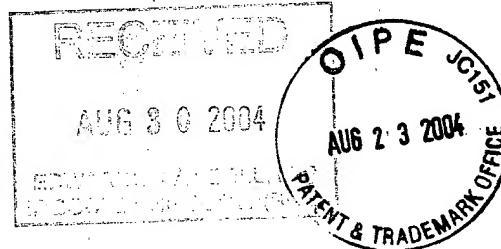
RLB



Mailing Date: August 23, 2004 Attorney/Sec: PFC/RLB/pb
Client: 71758 Docket No.: 46943-CIP2
Inventors: Jin-an JIAO, et al.
Serial No.: 09/990,586 Patent No.:
Filing Date: November 21, 2001 Grant Date:

The dating stamp of the Patent and Trademark Office hereon will be taken as the date of filing of:
LETTER; Copies of Form PTO-1449 (four sheets); Certificate of Express Mail.

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Due Date: N/A

SB



Attorney Docket No. 46943-CIP2 (71758)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Jin-an JIAO, et al.

U.S.S.N.: 09/990,586

Group Art Unit: 1644

FILED: November 21, 2001

Examiner: M. Haddad

FOR: ANTIBODIES FOR INHIBITING BLOOD COAGULATION AND
METHODS OF USE THEREOF

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

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CERTIFICATE OF EXPRESS MAIL

I, Patricia A. Barnes, hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service with sufficient postage as "Express Mail Post Office To Addressee" service, Label No. **EV438994545US** in an envelope addressed to Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 on August 23, 2004.

By: *Patricia A. Barnes*
Patricia A. Barnes

.....
Sir:

LETTER

We enclose herewith Form PTO-1449 sheets listing references for the Examiner's consideration in connection with the above-identified application. Copies of the references were previously submitted in related application USSN 10/230,880, filed August 29, 2002 (divisional of U. S. Patent No. 5,986,065).

If the Examiner should require copies of any of the references, they will be supplied on request.

USSN 09/990,586

Jin-an JIAO, et al.

LETTER

Pg. 2

Although it is not believed that any fee is needed to consider this Letter, the USPTO is authorized to charge deposit account number 04-1105 should such fee be deemed necessary.

Respectfully submitted,

Date: 23 August 2024



Robert L. Buchanan
Registration No. 40,927
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Boston, MA 02205
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Customer No.: 21874

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DEC 09 2004

FORM PTO-1449
INFORMATION DISCLOSURE STATEMENT

| | |
|-----------------------------------|-------------|
| DOCKET NO: | SERIAL NO.: |
| 46943-CIP2 (71758) | 09/990,586 |
| APPLICANT(S): Jin-an JIAO, et al. | |
| FILING DATE: | GROUP NO.: |
| November 21, 2001 | 1644 |

UNITED STATES PATENT DOCUMENTS

| EXAM. INITIAL S | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIAT |
|-----------------------|----|--------------------|----------|------------------|-------|----------|---------------------------------|
| | AA | 6,333,167 B1 | 12/25/01 | Quinet et al. | 435 | 23 | 03/10/00 |
| | AB | 6,245,884 B1 | 06/12/01 | Hook | 530 | 300 | 10/16/98 |
| | AC | 6,117,639 | 09/12/00 | Germann et al. | 435 | 6 | 08/31/98 |
| | AD | 5,958,713 | 09/28/99 | Thastrup et al. | 435 | 7.4 | 03/14/97 |
| | AE | 5,861,267 | 01/19/99 | Su | 435 | 23 | 05/1/95 |
| | AF | 5,171,662 | 12/15/92 | Sharma | 435 | 5 | 04/04/91 |
| | AG | 4,644,055 | 02/17/87 | Kettner et al. | 530 | 330 | 12/17/84 |
| | AH | 2002/0025508 A1 | 02/28/02 | Fechteler et al. | 435 | 4 | 01/05/01 |

FOREIGN PATENT DOCUMENTS

| | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATIO YES/NO |
|--|----|--------------------|------|---------|-------|----------|----------------------|
| | BA | | | | | | |
| | BB | | | | | | |
| | BC | | | | | | |
| | BD | | | | | | |
| | BE | | | | | | |
| | BF | | | | | | |

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

| | |
|----|---|
| CA | Boulianne, et al., "Production of functional chimaeric mouse/human antibody", Nature, Vol. 317, pp. 643-646, December 13, 1984. |
| CB | Bruggemann, et al., "The Immunogenicity of Chimeric Antibodies", J. Exp. Med., [Vol.] 170, pp 2153-2157, December 1989. |

EXAMINER:

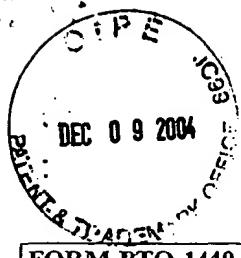
DATE:

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|-----------|----|--|
| | CC | Carter, et al., "Humanization of an anti-p185 ^{HER2} antibody for human cancer therapy", Proc. Natl. Acad. Sci. USA, Vol. 89, pp. 4285-4289, May, 1992. |
| | CD | Casipit, et al., "Improving the binding affinity of an antibody using molecular modeling and site directed mutagenesis", Protein Science, [Vol. 7], pp. 1671-1680, 1998. |
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| | CG | Jager, et al., "Current Status of Cancer Immunodetection With Radiolabeled Human Monoclonal Antibodies", Seminars in Nuclear Medicine, Vol. XXIII, No. 2, pp. 165-179, 1993. |
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| | CO | Leong, et al., "Adapting pharmacokinetic properties of a humanized anti-interleukin-8 antibody for therapeutic applications using site-specific pegylation", Cytokine, Vol. 16, No. 3, pp. 106-119, 2001. |
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| EXAMINER: | | DATE: |

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|--|-----|--|
| | | while preserving their ligand-binding properties", Molecular Immunology, Vol. 28, No. 4/5, pp. 489-498, 1991. |
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| | CCC | Roguska, et al., "A comparison of two murine monoclonal antibodies humanized by CDR-grafting and variable domain resurfacing", Protein Engineering, Vol. 9, No. 10, pp. 895-904, 1996. |
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| | CFF | Tan, et al., "Superhumanized" Antibodies: Reduction of Immunogenic Potential by Complementarity-Determining Region Grafting with Human Germline Sequences: Application to an Anti-CD28", The Journal of Immunology, [Vol. 169], pp. 1119-1125, 2002. |
| | CGG | Tempest, et al., "Reshaping a human monoclonal antibody to inhibit human respiratory syncytial virus infection <i>in vivo</i> ", Bio/Technology, Vol. 9, pp. 266-271, March 1991. |
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